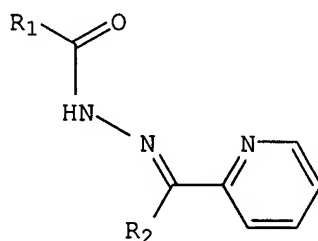


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue suitable for use as an *in vivo* iron chelator, the PCIH analogue having Formula 1:



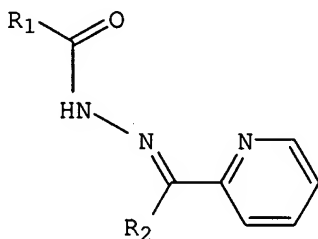
Formula 1

wherein R2 is either OH or H such that when R2 is OH R1 is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring; and R2 is either H or OH; isomers thereof; or salts thereof; or when R2 is H, R1 is thiophene, 2-, 3- or 4-bromophenyl optionally substituted with alkyl, halo, nitro, amine or hydroxyl attached to any of the vacant positions on the ring; phenol or aniline; or salts thereof.

2-3. (Canceled)

4. (Previously presented) The PCIH analogue according to claim 1 selected from the group consisting of 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), 2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-pyridylcarboxaldehyde p-hydroxybenzoyl hydrazone (PCHH), 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH), salts thereof, and isomers thereof.

5. (Currently amended) A pharmaceutical composition suitable for use as an iron chelator comprising a therapeutically effective amount of at least one 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue having Formula 1:



Formula 1

wherein R₂ is either H or OH such that when R₂ is OH R₁ is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring ~~and R₂ is either H or OH~~; isomers thereof or salts thereof; or when R₂ is H, R₁ is thiophene, 2-, 3- or 4-

bromophenyl optionally substituted with alkyl, halo, nitro, amine or hydroxyl attached to any vacant positions on the ring, phenol or aniline or salts thereof; together with a pharmaceutically suitable carrier or diluent.

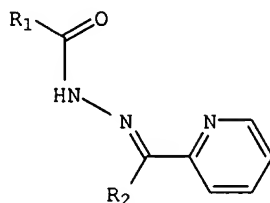
6-7. (Canceled)

8. (Previously presented) The pharmaceutical composition according to claim 5 wherein the 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue is selected from the group consisting of 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH), 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH), 2-pyridylcarboxaldehyde benzoyl hydrazone (PCBH), 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), 2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-pyridylcarboxaldehyde p-hydroxy benzoyl hydrazone (PCHH), salts thereof, and isomers thereof.

9. (Previously presented) The pharmaceutical composition according to claim 5 formulated for subcutaneous or intravenous injection, oral administration, inhalation, transdermal application, or rectal administration.

10. (Currently amended) A method of iron chelation therapy comprising administering to a patient a pharmaceutical composition ~~according to claim 5~~ comprising a therapeutically

effective amount of at least one 2-pyridylcarboxaldehyde
isonicotinoyl hydrazone (PCIH) analogue having Formula 1:



Formula 1

wherein R1 is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine or hydroxyl attached to any of the vacant positions on the ring, and R2 is either H or OH, isomers thereof or salts thereof, together with a pharmaceutically suitable carrier or diluent.

11. (Canceled)

12. (Currently amended) The method according to claim 10 ~~or~~ ~~11~~ wherein the pharmaceutical composition is administered in a dosage regimen of 30 - 50 mg per kg of body weight of the patient.

13. (Original) The method according to claim 12 wherein the dosage regimen is 50 - 100 mg per kg of body weight.

14. (Currently amended) The method according to claim 16 ~~10~~ wherein the patient suffers from β -thalassemia or Friedreich's ataxia.

15. (Canceled)

16. (New) The method according to claim 10 wherein the patient suffers from iron-overload.